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Are Socially Responsible Banks More Risk Averse and Dividends Providers? Empirical Evidence from a Developing Economy

Md. Al Amin^{1*} Rana Sikder¹ Tanvir Rahman Sohan²

¹ Department of Accounting, Mawlana Bhashani Science and Technology University

² Department of Management, Mawlana Bhashani Science and Technology University

ABSTRACT

Purpose: This study examines whether socially responsible firms are uninterested in risk-taking and whether socially responsible banks are more dividend providers than socially irresponsible ones. We conducted the analysis using the least-squares method for 290-panel data observations of 32 commercial banks operating in Bangladesh from 2008 to 2018. **Methodology:** We employed Ordinary Least Squares Regression for 290-panel data observations of 32 commercial banks operating in Bangladesh from 2008 to 2018 using EViews software version- 8. Moreover, we conducted descriptive analysis and correlations using SPSS software. We considered CSRI and CSRPI as the indicators of corporate social responsibility, dividend per share and stock dividend as a proxy of dividend policy, LEV (leverage), and non-performing loan to total loan as the indicators of financial risk, and lastly, Z score as the indicator of financial stability. **Findings:** Studies have shown that banks prioritizing social responsibility tend to pay dividends to their shareholders more frequently and consistently than banks that do not. In particular, banks that invest heavily in corporate social responsibility (CSR) tend to maintain a stable dividend payout, which can help address agency problems that arise from overinvestment in the CSR sector. Additionally, we found that banks that make huge expenditures on CSR also seem to have a low eagerness for risk-taking. Again, we found that the financial stability of a socially responsible bank is high and stable enough, which will help efficiently handle the bank's financial risks, reduce price fluctuations, and increase financial assets that generally influence a bank's monetary stability. **Implications:** Banks implementing fruitful CSR strategies can produce substantial shareholder advantages through high dividend payout levels. An expansion in CSR-related expenditure does not prompt a cut-down or reduce the portion of income paid out as dividends to shareholders. Therefore, the Output of our study will help provide critical information and a thorough understanding of corporate social responsibility and its association with the dividend policy, risk, and financial stability in the banking sector. This will also be useful to the researcher, students, and corporate policymakers while making a critical decision about whether a firm should make expenditures on CSR purposes, how it impacts a firm's dividend decision, and its connection with its overall risk and financial stability. According to the study, corporate social responsibility should be integrated into a firm's mission and strategy rather than appearing to be a mere act of generosity. **Originality/ Value:** This study uniquely considers CSR, dividend policy, risk, and financial stability simultaneously in a developing country. Besides, the three-dimensional measures of CSR used in the research focused on developing the economy are a precious contribution.

Keywords: Corporate Social Responsibility, Business stability, Risk, Stakeholders, Dividend policy, Bangladesh

*CORRESPONDING AUTHOR:

Email: talukdaramin@mbstu.ac.bd

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1. Introduction

At present, CSR is considered a popular topic and a prime subject for the business world. The reasons are that CSR's amenities are now prominent, such as reducing employee transfer rate, promoting reputation, enhancing customer satisfaction, inspiring employees, and operational proficiency (Tran et al., 2019)¹. Classical economists believe that a company's primary responsibility is to maximize shareholder value, and many private companies aim to increase their profit margin as their main objective. Classical economists believe that a company's primary responsibility is to maximize shareholder value, and many private companies aim to increase their profit margin as their main objective. Nevertheless, in reaching their ultimate goal, they should not perform their business activities in such a way that it will cause a negative side effect on the surrounding communities, environments, other stakeholders, and society at large. (Galant & Cadez, 2017)². Because business is for the betterment of people living in society, it is common sense that the business must rely on it to achieve its economic goals and objectives (Mc et al., 2000)³. While striving for their objectives, companies must ensure that no adverse effects are caused to society or other stakeholders. This involves upholding social, environmental, and corporate governance standards collectively called corporate social responsibility. (Gupta & Krishnamurti, 2018)⁴. While striving for their objectives, companies must ensure that no adverse effects are caused to society or other stakeholders. This involves upholding social, environmental, and corporate governance standards collectively called corporate social responsibility. While striving for their objectives, companies must ensure that no adverse effects are caused to society or other stakeholders. This involves upholding social, environmental, and corporate governance standards collectively called corporate social responsibility. (Benlemlih M., 2019)⁵. Moreover, when CSR efficiency is attained or improved in a company, it will help to reduce the total cost allocated to the CSR sector, as claimed by (Wang, Lai et al, 2018)⁶.

An ideal expenditure level of CSR can maximize the firm's profit while satisfying the needs of stakeholders, and the level should be determined by cost-benefit analysis (Mc Williams Siegel, 2000)³. As per the financial theory, maximizing profit and the value of shareholder's wealth are the main objectives of a business. Business concerns should not be dominated not only by the shareholders but also by stakeholders who are often inspired by non-financial interests such as - the firm's impact on the environment, community, and society. Businesses can build up potent reputational capital, which means goodwill, which will further transmute into economic benefit and, thus, shareholder wealth (Fombrun, Cardberg, & Barnett, 2000)⁷. Though the rise in CSR expenditure is consistent with the value maximization of firms' insiders may deem it over-investment in CSR sectors due to their private interest (Barnea & Rubin, 2010)⁸, (Benlemlih M., 2019)⁵. Due to increased pressure, companies often engage in corporate social responsibility (CSR) to fulfill their duties and responsibilities concerning economic, social, and environmental voluntary activities to their stakeholders for sustainable development (Smith, 2003)⁹. Again, several researchers argue that good CSR practices are a powerful tool because they attract talented and quality workforces and help in employment in an organization, which is a competitive advantage. In this regard, (Greening & Turban, 2000)¹⁰ found that Job seekers prefer socially responsible firms over irresponsible ones. Job seekers prefer socially responsible firms over irresponsible ones (Gatsi et al., 2016)¹¹. Corporate managers often encounter the task of decision-making on the company's vital issues relating to financing decisions, investment decisions, dividend policy, and social responsibility expenditure in favor of their shareholders. There has been a long-standing debate among scholars regarding the relationship between corporate social responsibility and firm performance. On the other hand, the performance of any company is measured by how much dividends the company can earn or declare in the form of cash and stock dividends.

High dividend distribution generally indicates the diminishing of the internal source of finance. However, long-term investors usually seek capital gains and dividends (Gusni, 2016)¹². (Benlemlih M. (2019)⁵ According to a report, high CSR (Corporate Social Responsibility)-providing firms are more likely to pay higher dividends than low CSR firms. This is based on two arguments. Firstly, the agency theory suggests that paying dividends can help minimize the inefficient use of an organization's resources. Secondly, the signaling theory proposes that a firm's dividend payout indicates strong prospects. Regarding CSR, firms are encouraged to create their resources ethically and sustainably. A high dividend payout ratio can increase the firm's reputation among potential stakeholders. According to a report, high CSR (Corporate Social Responsibility)-providing firms are more likely to pay higher dividends than low CSR firms. This is based on two arguments. Firstly, the agency theory suggests that paying dividends can help minimize the inefficient use of an organization's resources. Secondly, the signaling theory proposes that a firm's dividend payout indicates strong prospects. Regarding CSR, firms are encouraged to create their resources ethically and sustainably. A high dividend payout ratio can increase the firm's reputation among potential stakeholders. (Benlemlih M. (2019)⁵. (Brav et al. (2005)¹³ claimed that managers are strongly inclined to bypass dividend cuts in most companies. Several studies have explained the reasons why a company should pay dividends. However, dividend policy remains in the puzzle because there is no clear explanation of why firms should pay dividends to their stockholders. A firm's dividend policy is vital for several reasons: It is crucial for the investors who are expecting fixed income, to the analysts as a valuable tool of evaluation, and to the managers as well as the investors as a source of reinvestment to hold the company's growth during emergencies (Chai et al., 2011)¹⁴.

Our study examines the relationship between a firm's corporate social responsibility expenditure, dividend policy, risk, and stability. Dividends are

a crucial financial decision for most companies, and they are commonly used payout mechanisms, including cash and stock dividends. Our study examines the relationship between a firm's corporate social responsibility expenditure, dividend policy, risk, and stability. Dividends are a crucial financial decision for most companies, and they are commonly used payout mechanisms, including cash and stock dividends. (Benlemlih M, 2019)⁵. Moreover, Financial reporting frequency is also associated with large payouts, as shown by (Eije & Magginson (2008)¹⁵ and (Benlemliha (2019)⁵. Cash flow uncertainty can also affect a corporation's dividend payout policy. Declaration of dividends by firms causes a significant reduction of systematic risk when a firm increases dividend payments in time of their shareholders without raising their capital expenditures. However, they have to face a decrease in their profit when they incur any change in dividend payout policy. (Grullon et al., 2002)¹⁶.

Again, the motive of reporting corporate social responsibility is to reduce risk related to a company's reputation, as this reputational risk may reduce its profit and dividends (Unerman, 2008)¹⁷. The article considers the relationship between a company's CSR expenses and dividend policy. Is the relationship linear or non-linear?

Does CSR positively affect the company's dividend policy?

Does CSR affect a firm's dividend policy and financial risk?

The study aims to address the gap in the existing literature about the level of corporate social responsibility exhibited by companies and how it correlates with their dividend policy and financial risk stability in Bangladesh. Very few studies have been conducted on corporate social responsibility, dividend policy, and risk stability, jointly taking into consideration. Most CSR and dividend policy studies have concentrated on the developed and other countries. So, to the best of our knowledge, this study focuses mainly on developing countries like Bangladesh's economy. As a result, our approach to considering developing countries will help to shed

light on CSR, dividend policy, and risk stability.

The article is divided into several sections. The second section focuses on previous research that explores the connection between corporate social responsibility and dividend policy. The third section describes the methodology used in the study, including data, samples, and statistical techniques. The study's main findings are presented and discussed in the fourth section. The fifth and final section provides concluding remarks and suggests directions for future research.

2. Literature Review

Companies are now using Corporate social responsibility as a strategic tool to enhance their image, gain competitive advantages, and increase firm value. (Benlemlih M). (2019)⁵. (Lulewicz-Sas (2017)¹⁸ conducted a bibliometric analysis of scientific research on corporate social responsibility using VOS viewer software version 1.6.1. The bibliometric analysis results of scientific research on corporate social responsibility were presented in the findings. (Jensen (1986)¹⁹ mentioned corporate managers as the agents of shareholders, but conflicting interests may exist between them, which is known as the agency problem. This usually occurs when there is free cash flow in the organization. In this regard, dividend policy and growing interest in corporate social responsibility are essential in corporate finance. Payout of dividends to shareholders will lessen the firm's resources under managers' control in one hand. As a result, managers' power in an organization will also be reduced. However, managers welcome activities related to the firm's growth because growth raises managers' power, enhancing the firm's resources under their control. Again, regarding CSR, managers may benefit from recognizing themselves as socially responsible when firms invest vast amounts in social and environmental sectors. A similar result is revealed by (Barnea & Rubin, 2010)²⁰, who argued that managers and other insiders always asked for over-investment in CSR sectors for personal benefit because it increases their reputation and the “warm-

glow” effect. A recent study analyzed a unique dataset of 3,000 of the largest corporations in the U.S. to explore the relationship between firms' Corporate Social Responsibility (CSR) ratings, ownership, and capital structures. The study found that insider ownership and leverage are negatively correlated with a firm's social rating, while institutional ownership is not correlated. Insiders tend to encourage firms to invest more in CSR when it has little cost. Additionally, large, established companies with high leverage and a focus on growth are more likely to voluntarily maintain CSR and disclose socially responsible information to their stakeholders. This information was documented by (AL-Shubiri et al,2012)²¹. They developed a regression model to test the hypotheses and identify some critical determinants of CSR based on 60 companies in Jordan from 2006 to 2010. According to (Benlemliha's 2019)⁵ research, firms that invest more in corporate social responsibility (CSR) tend to pay higher dividends than those that invest less in CSR. The study analyzed data from 22,839 US firms for 21 years (1991-2012). (Benlemliha)⁵ found that socially irresponsible firms adjust their dividends more quickly than socially responsible firms. The study also revealed that high CSR-invested firms have a more stable dividend payout ratio. (Benlemliha)⁵ used univariate and multivariate methods, including comparison tests and regression models, to arrive at these conclusions. According to (Benlemliha's 2019)⁵ research, firms that invest more in corporate social responsibility (CSR) tend to pay higher dividends than those that invest less in CSR. The study analyzed data from 22,839 US firms over 21 years (1991-2012). (Benlemliha)⁵ found that socially irresponsible firms adjust their dividends more quickly than socially responsible firms. The study also revealed that high CSR-invested firms have a more stable dividend payout ratio. (Benlemliha)⁵ used univariate and multivariate methods, including comparison tests and regression models, to arrive at these conclusions. (Brown, Hilland, & Smith, 2006)²² used two CSR hypotheses based on data from 500 firms. They have done

descriptive statistics and Probit regressions. In agency cost theory, they revealed that managers are more inclined to use firms' resources for CSR purposes to fulfill their benefits. High donations to CSR help to recognize the insiders as good citizens and socially responsible, increasing reputation and goodwill with Stakeholders. Whereas (GODFREY, 2005)²³ mentioned some managerial implications of three core assertions of being socially responsible, namely, CSR creates positive moral principles among communities and stakeholders, moral outlay can protect relationship-based intangible assets that will raise shareholders' wealth. On the other hand, another study was conducted to show the linkage of CSR and the cost of bank debt based on 1996 US firms' loans in which (Goss & Robberts ,2011)²⁴ argued that in the absence of security, lenders seem to be very sensitive to CSR concern firms. Lenders are deemed indifferent to firms generally investing a wholesome amount in CSR. They used univariate analysis, summary statistics, and correlation matrix. Besides, (Rana and Asad ,2018)²⁵ asserted the positive impact of CSR on the Financial Performance of pharmaceutical companies in Pakistan using Panel Least Square Fixed Effect Regression.

(Linter ,1956)²⁶ developed a model regarding how corporations' income can be distributed among dividends, which is generally required in dividend smoothness analysis. (Miller and Modigliani ,1961)²⁷ empirically examined Dividend Policy, Growth, and the Valuation of Shares. They developed the irrelevance theory of dividend policy in both perfect and imperfect markets. In (1979, Bhattacharya)²⁸ developed a model that explains how firms can use cash dividends to signal their expected cash flows. This is particularly relevant when external investors may not have complete information about the firm's profitability. Bhattacharya's model shows how the investors' planning horizons affect the equilibrium level of the dividend payout ratio. This provides a useful comparative static result that can help firms to determine their dividend policy.

On the contrary, some studies have also shown neutral and negative impacts. Based on econometric

analysis, CSR has been found to have a neutral impact on corporations' financial performance (McWilliams & Siegel, 2000).³ (Qudah & Yusuf, 2015)²⁹ argued that the two components of dividends, D-P and DY, have a negative impact on share price volatility. They added that lower payout ratios would result in higher stock price volatility. They used most minor square regressions and correlations. Mandatorily reporting firms faced a subsequent reduction in profitability (Chen et al., 2017)³⁰. (Chemmanur et al., 2010)³¹ conducted a study on the corporate dividend policy by comparing the dividend policies of companies in Hong Kong and the United States. They performed a natural experiment and found that the smoothness of dividend payments of firms in Hong Kong was lesser than that of firms in the United States.

3. Methodology

3.1 Data Sources and Data Collection

In order to evaluate the interplay between corporate social responsibility, dividend policy, and risk stability in Bangladesh's banking sector, our primary objective is to conduct a comprehensive assessment. For this purpose, we have collected the balance sheets and income statements of 32 private and public banks operating in Bangladesh from 2008 to 2018. We have opted for this particular time period because CSR was first introduced in the country in 2007, and there is no available CSR data before 2008. The data collected will enable us to gain valuable insights into the dynamics of the banking industry in Bangladesh and help us understand the impact of CSR and dividend policy on risk stability.

3.2 Definition of variables

In our research, CSR measures are the independent variable, while dividend policy and risk stability are the dependent variables. Here, we have considered both cash dividend and stock dividend policy. In the study, we have shown how corporate social responsibility can affect a bank's dividend

policy, dividend stability, and risk stability. We also include several control variables in the study. We have described these variables in the below subsections:

3.2.1 Corporate Social Responsibility Measures

Following the study of (Goss & Roberts, 2011)²⁴ (GODFREY, 2005)²³, (Barnea & Rubin, 2010)²⁰, (Rana & Asad, 2018)²⁵, and (Kiran et al., 2015)³², use banks' participation in CSR activity in Education, health sector, community development, corporate governance, and environment protection. In their study, (Goss & Roberts, 2011)²⁴ used community, corporate governance, diversity, employee relations, environment, human rights, and product as indicators of CSR. On the other hand, (GODFREY, 2005)²³ measured CSR based on Employees' commitment, Communities and Regulators' legitimacy, Suppliers and Partners' trust, and Customers' perception of the brand. (Barnea & Rubin, 2010)²⁰ considered community relations, workforce diversity, employee relations, environment, non-US operations, and product safety and use as criteria for measuring CSR. (Rana and Asad, 2018)²⁵ used education, healthcare, environment, donations, and workers' welfare funds as the proxy for CSR. (Shubiri et al., 2012)²¹ measured CSR by considering the training and education, research, and development sectors. (Kiran et al., 2015)³² measured CSR by the total amount of CSR expenditure. In the study, we used the company's total expenditure on CSR considering Education (Rana and Asad, 2018)²⁵, (AL- Shubiri, Al-Abdallah, & Abu, 2012)²¹, health sector (Rana and Asad, 2018)²⁵, community development (Goss & Roberts, 2011)²⁴, (Barnea & Rubin, 2010)²⁰, corporate governance (Goss & Roberts, 2011)²⁴ and environment protection (Rana and Asad, 2018)²⁵, (Barnea & Rubin, 2010)²⁰ which is also supported by (Kiran et al., 2015)³².

At first, we count the total expenditure by banks on all of these sectors that are supported by (Kiran et al. (2015)³², (Shubiri et al., 2012)²¹, and (Rana & Asad, 2018)²⁵.

3.2.2 Dividend policy measures

Payout ratio of dividend policy: Following (Brockman & Unlu, 2009)³³, (Gusni, 2016)¹², and (Benlemlaha, 2019)⁵, we used cash dividends and stock dividends as the proxy of the dividend payout ratio. (Brockman and Unlu, 2009)³³ analyzed the relationship between the number of dividends paid and the payout ratio. In (2016, Gusni)¹² discussed the dividend payout ratio, while (Benlemlaha, 2019)⁵ measured cash dividends in three ways: by the ratio of cash dividends on common stocks to net sales, the ratio of cash dividends on common stocks to total assets, and by net sales and total assets. Again, he used dividend propensity and the stability of dividend payment.

Similarly, (Fenn & Liang 2001)³⁴ used cash and stock dividends as the dividend payout ratios. Again, payout propensity was used as the measurement variable of dividend ratio by (Shao et al., 2010)³⁵ and (Benlemlaha, 2019)⁵. (Chay & Suh, 2009)³⁶ used dividend earnings ratio, dividend-sales ratio, and share repurchase as proxies for dividend policy, while (Efni, 2017)³⁷ used dividend yield and dividend payout ratio as measurement variables. (Qudah & Yusuf, 2015)²⁹ used the dividend payout policy, which is measured by the ratio of dividend per share to earnings per share, and dividend yield, measured by dividend per share. (Asghar et al. (2011)³⁸ used two measures to proxy dividend policy: dividend yield and dividend payout ratio. The dividend yield is calculated by dividing the annual cash dividends paid to stockholders by the average stock market value in that year. The dividend payout ratio is calculated by dividing total dividends by total earnings. This study uses cash dividends (Fenn & Liang, 2001)³⁴; (Benlemlaha, 2019)⁵; (Efni, 2017)³⁷; (Asghar et al., 2011)³⁸ and stock dividends (Fenn & Liang, 2001)³⁴; (Benlemlaha, 2019)⁵; (Efni, 2017)³⁷ as proxies for the dividend payout ratio.

3.2.3 Financial Risk Measures

The leverage ratio is a useful metric to assess a bank's level of risk. It is calculated by dividing the

total debt by the total assets; the higher the ratio, the more the firm depends on debt financing, leading to increased risk for the bank (Zheng et al., 2017)³⁹. We calculated the non-performing loans to total loans ratio, representing the percentage of non-performing loans in the bank's total loan portfolio.

3.2.4 Stability Measure

The Z-score measures banking stability and risk. This metric determines the distance from insolvency by dividing the overall risk of dividends by the standard deviation. A higher Z-score indicates higher stability. According to studies conducted by (Klomp & Haan, 2015)⁴⁰, (Zheng et al., 2017)³⁹, (RAHMAN, ZHENG, & ASHRAF, 2015)⁴¹, (Laeven & Levine, 2009)⁴², (Nash & Sinkey, 1997)⁴³ (Demirg. u-c-Kunt & Detragiache, 2002)⁴⁴, (Lepetit & Strobel, 2013)⁴⁵, (Lepetit & Strobel, 2015)⁴⁶, and

(Beck et al., 2013)⁴⁷, a higher Z score indicates that a bank is less likely to be fragile.

3.2.5 Control variables

Following (Chay & Suh, 2009)³⁶, (Benlemliha, 2019)⁵, (Galema et al., 2008)⁴⁸, (Barnea & Rubin, 2010)²⁰, (Deshmukh et al., 2013)⁴⁹ and (Shao, Kwok & Guedhami, 2010)⁵⁰, we used some control variables too Barnea and Rubin (2010) controlled for firm size, growth, and age using the book value of total assets, market-to-book ratio, and number of years, respectively. In another study, (Benlemliha, 2019)⁵ used several control variables, namely Firm size (total assets), Cash holdings, Growth opportunities, Leverage (total debt to total assets ratio), and Profitability. Galema et al. (2008) used size, return, turnover, and age as control variables, while (Barnea & Rubin, 2010)²⁰ considered Firm size (measured by the book value of total assets), growth (the market to book ratio), and Firm's age (the number of years) as control variables. In previous studies conducted by (Shao et al., 2010)³⁵ and (Deshmukh et al., 2013)⁴⁹, various control variables were considered. (Shao et al., 2010)³⁵ considered Leverage, Growth, Profitability, Firm Size, and Life Cycle as control variables, while (Deshmukh et al., 2013)⁴⁹ included Growth opportunities, cash flow, and firm size as control variables. In our study, we have also

considered several control variables. These variables are firm size, measured by total assets, and asset growth, measured by the change in total asset value over time.

3.3 Empirical model development

Several literature pieces, such as (Tran et al. & Do 2019)¹, (Benlemliha 2019)⁵, (AL-Shubiri et al., 2012)²¹, (Gupta & Krishnamurti, 2018)⁴, (Rana & Asad, 2018)²⁵, (Wang et al., 2018)⁶, (Gusni, 2016)¹², and others, have demonstrated that banks have a relationship between corporate social responsibility and dividend policy, or performance and dividend policy, with financial risk. No regression evidence was found for these three things. Thus, it is more intuitive to understand the impact of CSR on dividend policy and bank risk. In order to address the gap in existing research, we have employed a simultaneous equation model for our study. We will use 2OLS to test the relationship between CSR and bank risk and the impact of dividend policy. We will also include various bank-level control variables and some macroeconomic variables in our analysis. The study considers Corporate Social Responsibility (CSR) an endogenous variable. Banks prioritize their profitability but must also allocate funds for CSR activities that benefit society.

Several kinds of literature such as (McWilliams & Siegel, 2000)³, (He, Li, & Tang, 2012)⁷⁸, (Eije & Magginson, 2008)⁷⁹, (Lintner, 1956)²⁶, (Desai et al., 2007)⁸⁰, (Jo & Na, 2016)⁶⁵ and among others; introduced a single equation in the model considering only dividend or only CSR or only risk factors. For example, (McWilliams & Siegel, 2000)³, (He, Li, & Tang, 2012)⁷⁸, (Eije & Magginson, 2008)⁷⁹, (Lintner, 1956)²⁶, and (Chemmanur et al., 2010)³¹ introduced a single equation that emphasized dividend in the model, $Dit = \beta_0 + \beta_1 Dit + \beta_2 \pi it + \epsilon it$. However, they did not consider the firm's investment in the above equation. Then, to overcome this limitation, Lintner's model was expanded by (Desai et al. (2007)⁸⁰ and Kim & Jeon (2015)⁸¹, who developed another single equation, including a firm's investment that emphasized dividends, but they did not consider

Main Variables	Definition and measure	Impact on Risk (Expected Sign)	Impact on Dividend (Expected Sign)	Data source
Dividend Measures:				
DPS	dividend per share	-		(Kaźmierska-Jóźwiak, 2015), ⁵¹ , (Gusni, 2017) ⁵² , (Yusof & Ismail, 2016) ⁵³ , (Consler & Lepak, 2011) ⁵⁴
DYR	dividend yield (dividend-to-price ratio)			(Al-Malkawi, 2007) ⁵⁵ , (Al-Najjar, 2009) ⁵⁶ , (Harada & Nguyen, 2011) ⁵⁷
Stock Dividend	Stock dividend/ dividend or 1-Cash dividend/ dividend	+		(Sah & Zhou, 2012) ⁵⁸ , (Khan, Burton, & Power, 2011) ⁵⁹
Cash Dividend	Dividend payout ratio, which is measured as dividend per share/ earnings per share	-		(Kaźmierska-Jóźwiak, 2015), ⁵¹ , (Gusni, 2017) ⁵² , (Boulton, BragaAlves, & Shastri, 2012) ⁵⁹ , (Benlemliha, 2019), ⁵ , (Khan, Burton, & Power, 2011) ⁵⁹
Dividend Payout Ratio	Dividend per share/earnings per Share			(Gusni, 2017) ⁵² , Kaźmierska-Jóźwiak, 2015), ⁵¹ , (Benlemliha, 2019), ⁵
Risk measures:				
Financial Leverage	the ratio of debt to equity / Ratio of debt to total assets	+	-	(Al-Twajjry, 2007) ⁶⁰ , (Abor & Bokpin, 2010) ⁶¹ , (Duygun, Guney, & Moin, 2018) ⁶² , (Zheng, Moudud-UIHuq) ³⁹ , (Rahman, & Ashraf, 2017) ⁴¹ , (Kaźmierska-Jóźwiak, 2015) ⁵¹ (Chalermchatvichien, Jumreomvong, Jiraporn, & Singh, 2013) ⁶³ , (Al-Najjar, 2009) ⁵⁶ , (Al-Ajmi & Hussain, 2011), (Gusni, 2016) ¹² , (Gusni, 2017) ⁵² , (Abor & Fiador, 2013) ⁶⁴ , (Benlemliha, 2019) ⁵ , (Harada & Nguyen, 2011) ⁵⁷ , (Jo & Na, 2016) ⁶⁵
Credit Risk	non-performing loans to total loans		-	(Abor & Bokpin, 2010) ⁶¹ , (ECHCHABI & AZOUZI, 2016) ⁶⁶ , (Zheng et al., 2017) ³⁹ , (Barth et al., 2004) ⁶⁷ , (Al-Najjar & Hussainey, 2009) ⁶⁸ , (Al-Najjar, 2009) ⁵⁶ , (Gusni, 2016) ¹²
Stability (Z Score)	Overall risk / standard deviation of dividend		-	(Klomp & Haan, 2015) ⁴⁰ , (Zheng, Moudud-UI-Huq, Rahman, & Ashraf, 2017) ³⁹ , (RAHMAN, ZHENG, & ASHRAF, 2015) ⁴¹ , (Laeven & Levine, 2009) ⁴² , (Nash & Sinkey, 1997) ⁴³ , (Demirg. u-c-Kunt & Detragiache, 2002) ⁴⁴ , (Lepetit & Strobel, 2013) ⁴⁵ , (Lepetit & Strobel, 13 2015) ⁴⁶ , (Beck et al., 2013) ⁴⁷
Bank-Level Variables				
Corporate Governance	board of directors	+/-	+	(Zheng, Moudud-UI-Huq, Rahman, & Ashraf, 2017) ³⁹ , (Al-Ajmi & Hussain, 2011) ⁶⁹ , (Gusni, 2017) ⁵² , (Abor & Fiador, 2013) ⁶⁴
Size	Natural logarithm of total assets.	+/-	+	(Hussain & Hassan, 2005) ⁷⁰ , (A., Kouretas, & Tsoumas, 2014) ⁷¹ , (Laeven & Levine, 2009) ⁴² , (Zribi & Boujelbène, 2011) ⁷² , (Zheng, Moudud-UI-Huq, Rahman, & Ashraf, 2017) ³⁹ , (Duygun, Guney, & Moin, 2018) ⁶² , (Abor & Bokpin, 2010) ⁶¹ , (Hussainey, Mgbame, & Chijoke-Mgbame, 2011) ⁷³ , (Kaźmierska-Jóźwiak, 2015) ⁵¹ , (AlNajjar & Hussainey, 2009) ⁶⁸ , (AlMalkawi, 2007) ⁵⁵ , (Al-Najjar, 2009) ⁵⁶ , (Al-Ajmi & Hussain, 2011) ⁶⁹ , (Gusni, 2017) ⁵² , (Benlemliha, 2019) ⁵ , (Harada & Nguyen, 2011) ⁵⁷ , (Hussain & Hassan, 2006) ⁷⁴

Main Variables	Definition and measure	Impact on Risk (Expected Sign)	Impact on Dividend (Expected Sign)	Data source
Profitability	Return on assets (ROA): the ratio of net income to total assets / Earnings per share	-	+	(ECHCHABI & AZOUZI, 2016) ⁶⁶ , (Abor & Bokpin, 2010) ⁶¹ and (Duygun, Guney, & Moin, 2018) ⁶² , (Al-Najjar & Hussainey, 2009) ⁶⁸ , (Al-Malkawi, 2007) ⁵⁵ , (Al-Najjar, 2009) ⁵⁶ , (Al-Twajjry, 2007) ⁶⁰ , (Gusni, 2016) ¹² , (Abor & Fiador, 2013) ⁶⁴ , (Benlemliha, 2019) ⁵ , (Harada & Nguyen, 2011) ⁶¹
Growth	The percentage change in the sales between 2012 and 2013.		-	(ECHCHABI & AZOUZI, 2016) ⁶⁶ , (Hussainey, Mgbame, & Chijoke & Mgbame, 2011) ⁷³ , (Duygun, Guney, & Moin, 2018) ⁶² , (Al-Najjar & Hussainey, 2009) ⁶⁸ , (Al-Malkawi, 2007) ⁵⁵ , (Al-Najjar, 2009) ⁵⁶ , (Abor & 14 Fiador, 2013) ⁶⁴ , (Benlemliha, 2019) ⁵ , (Harada & Nguyen, 2011) ⁶¹
Market To Book Value	The market value of equity is divided by the book value of equity.		-	ECHCHABI & AZOUZI, 2016) ⁶⁶ , (Duygun, Guney, & Moin, 2018) ⁶² , (Deshmukh, Goel, & Howe, 2013) ⁴⁹ , (Al-Malkawi, 2007) ⁵⁵
Retained Earnings		+/-	-	Author's estimation
Liquidity	the current ratio, measured as current assets/current liability		+	Kaźmierska-Jóźwiak, 2015) ⁵¹ , (Al-Najjar & Hussainey, 2009) ⁶⁸ , (Al-Najjar, 2009) ⁵⁶ , (Hussain & Hassan, 2006) ⁷⁴
Macroeconomic Variables				
Inflation	Annual inflation rate	+/-		Chaibi & Ftiti, 2015) ⁷⁵ , (Hussain & Hassan, 2005) ⁷⁴ , (Zheng et al., 2017) ³⁹ , (Abor & Bokpin, 2010) ⁶¹ , (Abor & Bokpin, 2010) ⁶¹ , (Zheng, Moudud-Ul-Huq, Rahman, & Ashraf, 2017) ³⁹ , (Chaibi & Ftiti, 2015) ⁷⁵ , (Stolz & Wedow, 2011) ⁷⁶ , (Jokipii & Milne, 2008) ⁷⁷
GGDP	GDP per capita	-	+	

CSR, Stability, and Risk-taking. Similarly, (Kaźmierska-Jóźwiak (2015)⁵¹ developed a single equation to identify the factors of dividend policy, including some other bank-level variables, namely leverage ratio, current ratio, return on equity, and size. Here, (Kaźmierska-Jóźwiak, 2015)⁵¹ focused mainly on dividends and risk (risk relating to future earnings) but did not include CSR and stability. Whereas (Gusni, 2016)¹² broadened the model developed by (Kaźmierska-Jóźwiak, 2015)⁵¹ to another single equation considering corporate governance mechanism and systematic risk measured by beta on the dividend payout ratio. However, it does not consider CSR and Stability in the single model. On the contrary, (Williams & Siegel, 2000)³, (Jo & Na, 2016)⁶⁵, and (Benlemlih M, 2019)⁵ developed another single equation that focused on corporate social responsibility and performance but did not consider risk-taking and stability. Moreover,

(AL-Shubiri et al., 2012)²¹, and Barnea & Rubin (2010)²⁰ developed a single equation focused on the factors affecting corporate social responsibility only, not dividends, risk-taking, and stability. Most of the literature has shown that banks have a relationship between dividends and risk, corporate social responsibility with financial performance, and corporate social responsibility with risk. Very few studies have focused on corporate social responsibility, dividend policy, risk-taking, and stability in a regression equation.

From the above model developed, we can draw a more specific model.

$$DIV_{i,t} = \alpha_0 + \alpha_1 DIV_{i,t-1} + \alpha_2 RISK_{i,t} + \alpha_3 CSR_{i,t} + \alpha_4 PROFITABILITY + \alpha_5 RETAINED EARNINGS + \alpha_6 MVE_{i,t} + \alpha_7 CG_{i,t} + \alpha_8 SIZE_{i,t} + \alpha_9 ASSET GROWTH_{i,t} + \alpha_{10} ROE_{i,t} + \varepsilon_{it} \text{ eq. (1)}$$

$$RISK_{i,t} = \beta_0 + \beta_1 RISK_{i,t-1} + \beta_2 DIV_{i,t} + \beta_3 CSR_{i,t} + \beta_4 LLP + \beta_5 PROFITABILITY + \beta_6 LEV$$

$$+ \beta_8 CG_{i,t} + \beta_9 SIZE_{i,t} + \varepsilon_{it} \text{ eq. (2)}$$

Where *i* indicates the banks and *t* refers to the time. ε_{it} means the error term. In equation (1), the dividend is a dependent variable; in the 2nd equation, bank risk is a dependent variable.

Generalized methods of moments (GMM) were applied to examine the relationships among bank size, regulatory capital ratios, and banks' risk-taking behavior (RAHMAN, ZHENG, & ASHRAF, 2015)³¹, households' non-performing loans (Abid et al., 2014)⁸², the dividend payout behavior under monetary policy restrictions (Pandey & Bhat, 2007)⁸³, bank regulation and banking risk (measured by Z-scores) depending on bank structure (Klomp & Haan, 2015)⁴⁰, non-performing loans of banks in a market-based economy (Chaibi & Ftiti, 2015)⁷⁵, and corporate social responsibility and investment (Galema et al., 2008)⁴⁸.

SEM (Structural Equation Modelling) was applied to analyze the connection between corporate disclosures and banking risk (Sharif & Lai, 2015)⁸⁴.

Ordinary least squares regression (OLS) was applied to analyze the association among bank asset structure, real-estate lending, and risk-taking behavior (Blasko & Sinkey, 2006)⁸⁵, corporate social responsibility and dividend policy (Benlemlih M., 2019)⁵, corporate social responsibility and bank risk (Jo & Na, 2016)⁶⁵, CSR and dividend policy (Trihermanto & Nainggolan, 2019)⁸⁶, and factors of dividend policy (Brockman & Unlu, 2009)⁸⁷.

Two-Stage Least Square (2SLS), The Hausman test, and the Granger-causality Test were used to analyze the interrelationship among disclosure, risk, and performance (Ibrahim et al., 2011)⁸⁸, CSR activities and industry risk level (Jo & Na 2016)⁶⁵, capital regulation and risk-taking behavior and ownership structure of banks (Zheng et al., 2017)³⁹, corporate social responsibility and bank loans (Goss & Roberts, 2011)⁸⁹.

Three-stage least square (3SLS) was applied to examine whether CSR activities minimize industry risk (Jo & Na, 2016)⁶⁵, agency cost and corporate social responsibility (Brown et al., 2006)²², and institutional factors affecting corporate social responsibility (Wang et al., 2018)⁶.

Multiple least square regressions were applied (Qudah & Yusuf, 2015)²⁹ to know the connection between dividend policy and stock price volatility, factors affecting corporate social responsibility (Fauzi & Idris, 2010)⁹⁰, determinants of Corporate Social Responsibility (Abdullahi et al., 2018), banks' risk-taking, ownership structures, and regulations (Laeven & Levine, 2009)⁴², ownership concentration and risk-taking behavior (Chalermchatvichien et al., 2013)⁶³, corporate social responsibility and banks' performance (Okegbe & Egbunike, 2016)⁹¹, corporate social responsibility, managerial ownership, and institutional ownership to corporate value (Rahmadiani & Asandimitra, 2017)⁹².

Multivariate regression analysis was applied to analyze bank risk and diversification of product (Lepetit & Strobel, 2015)⁴⁶, the connection between audit fees and CSR reporting (Chen et al., 2016)⁹³, CSR activities and bank risk (Jo & Na, 2016)⁶⁵, and an association between CEO overconfidence and dividend payout policy (Deshmukh et al., 2013)⁴⁹.

Multiple Tobit regressions and Logit regressions were applied to analyze the relationship between dividend policy and risk (Chay & Suh, 2009)³⁶, CEO overconfidence and dividend payout policy (Deshmukh et al., 2013)⁴⁹, financial performance of banks and corporate social responsibility (Umobong & Agburuga, 2018)⁹⁴, dynamics of corporate dividend policy (Chemmanur et al., 2010)³¹, financial constraints of firms with different CSR focus (Chan et al., 2016)⁹⁵, Chinese capital markets of disclosing information on corporate misrepresentation in a corporate social responsibility report (Hu et al., 2019)⁹⁶.

In our study, we conducted the descriptive analysis, correlation matrix of all variables using SPSS software, and Least Squares regressions using EViews software version 8 to derive the actual result of the model. While determining the effect of Corporate Social Responsibility on Dividend Policy, we have used two models showing the impact of dividend per share and stock dividend as the indicators of dividend policy. Similarly, we have applied leverage and non-performing loans to the total asset as the risk indicators in two different models while showing the effect of Corporate Social Responsibility on Risk. Finally, we used the Z score

as an indicator of financial stability while analyzing the impact of corporate social responsibility on financial stability. We have produced three models, considering the overall dividend per share, stock dividend, and cash dividends.

4. Analysis of the Results

4.1 Descriptive Statistics

Based on **Table 1**, our variable CSRPI has a mean value of 1.793 with a minimum of 0 and a maximum of 71.17, where the standard deviation

is 5.43. Here, DPS and stock dividends have mean values of respectively 66.264 and 58.456, which is a positive sign with a maximum of 8150 and 8140. CG, ROA, RE, MVE, LEV, NPLTTL, LLP, and Z SCORE have a positive mean value of .987, 1.137, 1516.125, 17041.263, .920, .071, 5223.952, and 19.001, respectively with the maximum value of 1, 6.05, 13559.22, 84535.84, 1, 1, 73675.2 and 42.66, minimum value of 0.75, -4.93, -18728.09, 0, 0.85, 0, 137.58 and -13.04. We have considered two control variables, namely Bank Size and AG, which have a mean value of 12.211 and 19.481, respectively.

Table 1: Descriptive Statistics of all the variables

Variables	Minimum	Maximum	Mean	Std. Deviation
CSR	0.000	71.170	1.793	5.413
CG	.75	1.00	.987	.031
AG	-.560	332.820	19.481	23.359
MVE	0.000	84535.840	17041.263	14094.028
LLP	137.580	73675.200	5223.952	9921.423
ROA (%)	-4.930	6.050	1.137	.917
CD	0.000	40.000	7.808	8.012
STD	0.0	8140.0	58.456	533.457
DPS	0.000	8150.000	66.264	533.635
Size	10.79	14.85	12.211	.668
Z-score	-13.040	42.660	19.001	8.283
LEVERAGE	.850	1.000	.920	.0229
RE	-18728.090	13559.220	1516.125	2937.147
NPLTTL	0.0	1.0	.071	.097

4.2 Correlation matrix

All the variables in **Table 2** represent the correlation matrix among them. The result showed a positive and negative correlation between the dependent and independent variables. From the table, DPS, Stock dividend, ROA, RE, NPLTL, and LLP are statistically negatively correlated with the CSRPI (independent variable). That means if these dependent variables increase, the independent variable will decrease. Meanwhile, MVE, Size, AG,

and LEV positively correlate with CSRPI, which means that if these dependent variables increase, the independent variable will also increase. Moreover, Z SCORE has significantly and positively correlated with CSRPI (independent variable) where p-value > 01. Moreover, there is no multicollinearity problem. This correlation matrix provides the relationship of dependent variables with the independent variable, but in the next section, we used the Least Squares Method to determine the effect.

Table 2: Correlation matrix

Variables	CSR	CG	AG	MVE	LLP	ROA	CD	STD	DPS	Size	Z-score	LEV	RE	NPLTTL
CSR	1	.098	.082	.009	-.046	-.030	-.058	-.029	-.030	.017	.196**	.035	-.004	-.042
CG	.098	1	.133*	.154**	-.098	.027	.094	-.337**	-.336**	.063	.153**	-.037	.067	.008
AG	.082	.133*	1	.144*	-.104	-.043	.060	-.066	-.065	.283**	.170**	.076	.133*	-.040
MVE	.009	.154**	.144*	1	-.160**	.317**	.108	-.101	-.100	.101	.248**	-.277**	.243**	-.138*
LLP	-.046	-.098	-.104	-.160**	1	-.448**	-.199**	.076	.073	.647**	-.307**	.308**	-.350**	.451**
ROA	-.030	.027	-.043	.317**	-.448**	1	.073	.031	.032	-.494**	.381**	-.543**	.401**	-.331**
CD	-.058	.094	.060	.108	-.199**	.073	1	.015	.030	-.042	.096	-.128*	.070	-.106
STD	-.029	-.337**	-.066	-.101	.076	.031	.015	1	1.000**	.114	-.057	.055	.129*	.011
DPS	-.030	-.336**	-.065	-.100	.073	.032	.030	1.000**	1	.113	-.055	.053	.130*	.010
Size	.017	.063	.283**	.101	.647**	-.494**	-.042	.114	.113	1	-.135*	.383**	-.043	.399**
Z-score	.196**	.153**	.170**	.248**	-.307**	.381**	.096	-.057	-.055	-.135*	1	-.311**	.218**	-.184**
LEV	.035	-.037	.076	-.277**	.308**	-.543**	-.128*	.055	.053	.383**	-.311**	1	-.243**	.248**
RE	-.004	.067	.133*	.243**	-.350**	.401**	.070	.129*	.130*	-.043	.218**	-.243**	1	-.185**
NPLTTL	-.042	.008	-.040	-.138*	.451**	-.331**	-.106	.011	.010	.399**	-.184**	.248**	-.185**	1

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed).

4.3 Regression Analysis Using Least Squares Method

Table 3: The Effect of Corporate Social Responsibility on Dividend Policy

Variable	Model-1	Model-2
DPSLAG	-0.130** -2.298	
STDLAG		-0.129** -2.70
CSRRI	2850.892*** 2.554	2859.91*** 2.565
CG	-5673.612*** -6.205	-5697.345*** -6.236
ROA	89.620** 2.101	89.670** 2.104
RE	0.033*** 2.962	0.0328*** 2.948
MVE	-0.006*** -2.761	-0.006*** -2.780
SIZE	231.176*** 4.167	231.723*** 4.181
AG	-2.371* -1.812	-2.389* -1.827
Adjusted R-squared	17.97%	18.07%
No. of observations	290	290
No. of banks	32	32

*** Significant level at 1%, ** Significant level at 5%, * Significant level at 10%

In the above table, the overall dividend is measured by DPS, where the dependent variable and independent variables for model-1 are DPSLAG, CSRI, CG, ROA, RE, MVE, SIZE, and AG. In contrast, the dividend is measured by stock dividend in model 2. Among the independent variables, the value of Coefficient is DPSLAG (-0.130**), CSRI (2850.892***), CG (-5673.612***), ROA (89.620**), RETAINED EARNINGS (0.033***), MARKET VALUE OF EQUITY (-0.006***) and SIZE (231.176***) respectively with a p-value less than 0.05 (p<0.05), which means all of these independent variables are statistically significant to define the dependent variable in model-1. CSRI, ROA, RETAINED EARNINGS, and SIZE have a positive value of correlation coefficient, that means if CSRI, ROA, RETAINED EARNINGS, and SIZE increase in one unit will increase dividend payment. In the case of CSRI, the value of t-Statistic is 2.554 (t>2), and the p-value is 0.01*** (p< 0.05); both statistically have a significant and Positive effect on the dividend policy, and this result is also supported by (Benlemlih et al. (2016)⁵ and (Gatsi et al. (2016) ¹¹. That implies that if a company incurs more expenditure

on corporate social responsibility, it will increase the payment of dividends because to reach the goal, an organization needs to fulfill stakeholders' financial and non-financial claims. Thus, when the dividend is paid to meet the shareholders' financial commitment up to a certain level, the firm must fulfill non-financial commitment through performing CSR activities. Again, the Firm allocates dividends from its earnings to its shareholders and makes CSR expenditures out of its dividends. Therefore, When the Firm makes obsessive expenditures on CSR, its dividend-paying capacity will be narrow. However, when dividend payments to shareholders arrive at a high level, CSR cannot always be expected to be positively associated with dividend payments, and obsessive expenditures on CSR out of profit will result in mediocre dividend payments to shareholders.

On the other hand, AG has a value of 0.071* ($p > 0.05$), which means it is statistically insignificant. T-Statistic measures the number of standard errors that the coefficient is from zero, and greater than 2 indicates that it is also statistically significant. In contrast, a value less than two means that it is insignificant. Another good indicator for OLS model estimation is Adjusted R-squared (17.97%), that means 17.97% variation of dividend per share can be explained by the variation of DPSLAG, CSRI, CG, ROA, RETAINED EARNINGS, MARKET VALUE OF EQUITY, SIZE, AND AG (independent variables). Moreover, the remaining 82.03% can be explained by the fluctuation of those variables, which is not considered in our regression model.

Similarly, in model 2, the coefficient value of CSRI is 2859.91*** ($p < 0.05$), and the t-Statistic is 2.565 ($t > 2$), which means an increase in one unit of CSRI will increase stock dividend payment. STDLAG, CSRI, CG, ROA, RE, MVE, size, and AG are statistically significant in defining the dependent variable in Model 2. Here, the value of Adjusted R-squared (18.07%), which means that the 18.07% variation of stock dividend per share is explained by the variation of STDLAG, CSRI, CG, ROA, RETAINED EARNINGS, MARKET VALUE OF EQUITY, SIZE, AND AG (independent

variables). Furthermore, the remaining portion of 81.93% can be explained by the fluctuation of those variables, which is not considered in our regression model. Therefore, socially responsible firms are more dynamic in paying dividends to shareholders than socially irresponsible firms. The dividend payout level is stable in high-invested CSR firms because high-invested CSR firms maintain their dividend policy to handle agency problems due to overinvestment in the CSR sector.

Table 4: The Effect of Corporate Social Responsibility on Risk

Variable	Model-1	Model-2
LEVLAG	-0.002*	
	-0.027	
NPLTLLAG		0.010*
		0.168
DPS	1.43*	-7.21*
	0.855	-0.68
CD		
CSR	-0.007***	-0.0015*
	-4.363	-0.8744
LLP	1.84*	
	1.623	
ROA	-0.034***	-0.023***
	-3.151	-3.501
CG	-0.058*	-0.215*
	-0.205	-1.414
SIZE	-0.074***	0.042***
	-4.193	4.439
LEV		-0.216*
		-1.251
Adjusted R-squared	11.30%	15.80%
No. of observations	288	290
No. of banks	32	32

*** Significant level at 1%, ** Significant level at 5%, * Significant level at 10%

In the above table, the overall risk is measured by leverage in model 1 and non-performing loan to total loan in model 2. The independent variable is corporate social responsibility, measured by CSRPI in both cases. In model-1, the value of the coefficient of CSRPI is -0.007*** ($p < 0.05$), and SIZE is -0.074*** ($p < 0.05$), which means there is a statistically negative association with corporate social responsibility. Thus, an increase in one unit of financial risk will decrease the amount of expenditure for CSR purposes. Moreover, this result is supported by the findings of (Benlemlih et al,2016)⁵ and (Gatsi et al,2016)¹¹. High leverage enhances the cost of transactions and fixed expenditures for raising capital

from external financial sources. As a result, firms have to pay a large amount of money from their income to use external capital sources as a fixed payment. The higher the leverage ratio, the lower the possibility of dividend since leverage has a negative relationship with dividend which is argued by Al-Twajry (2007)⁶⁰, Abor & Bokpin (2010)⁶¹, Duygun et al., (2018)⁶², Zheng et al., (2017)³⁹, Kaźmierska-Jóźwiak (2015)⁵¹ Chalermchatvichien et al., (2013)⁶³, Al-Najjar (2009)⁵⁶, Al-Ajmi & Hussain (2011)⁶⁹, Gusni (2016)¹², Gusni (2017)⁵², Abor & Fiador (2013)⁶⁴, Benlemliha (2019)⁵, Harada & Nguyen (2011)⁵⁷, Jo & Na (2016)⁶⁵. Therefore, when a firm makes payments of an enormous amount from its income on fixed payments to raise capital from external financial sources for this purpose, it must lessen its expenditures in the CSR sector. On the contrary, in model 2, the overall risk is measured by non-performing loans to total loans. Similarly, there is a statistically negative association between corporate social responsibility and overall risk, which means an increase in one unit of financial risk will decrease the amount of expenditure for CSR purposes. Therefore, it implies that banks that make huge CSR expenditures also seem to have low intentions to take risks.

Table 5: The Effect of Corporate Social Responsibility on Financial Stability

Variable	Model-1	Model-2
ZSCORELAG	0.641*** 16.370	0.655*** 16.824
DPS	-0.003* -0.617	
CSR	0.179*** 3.110	0.177*** 3.108
LEV	-21.375** -2.094	-28.979*** -2.773
ROA	2.518*** 6.493	2.655*** 6.866
CG	7.119* 0.782	14.374* 1.512
SIZE	1.331*** 2.445	1.276*** 2.351
STD		-0.002* -0.332
Adjusted R-squared	59.30%	59.80%
No. of observations	290	288
No. of banks	32	32

*** Significant level at 1%, ** Significant level at 5%, * Significant level at 10%

In **Table 3**, financial stability is measured by the z score in three models. Here, CSRPI is considered

a proxy of corporate social responsibility. In the above three models, we respectively used DPS and stock dividends. The value of coefficients of CSRPI is 0.179***, and the t value is 3.110 (t>2) for model 1, and the coefficients of CSRPI are 0.177*** (t= 3.108, t>2) for model-2 respectively, indicating that there is a statistically positive association of corporate social responsibility and financial stability. Among all of the independent variables, the values of the Coefficient are ZSCORELAG (0.641***), CSRI (0.179***), Leverage (-21.375**), ROA (2.518***), and SIZE (1.331***), respectively and have a p-value less than 0.05 (p<0.05) that means all of these independent variables are statistically significant to define the dependent variable in model-1. Another good indicator for OLS model estimation is Adjusted R- squared (59.30%), which means 59.30% variation of dividend per share is explained by the variation of DPSLAG, CSRPI, CG, ROA, RETAINED EARNINGS, MARKET VALUE OF EQUITY, SIZE, and AG (independent variables). Again, the remaining 40.70% can be explained by the fluctuation of those variables, which is not considered in our regression model. Similarly, the Adjusted R- R-squared value is 59.80% for model 2. A positive ratio of the Z score indicates that the bank’s financial stability is high and stable enough. It helps in measuring and efficiently handling the risks, shunning price fluctuations of real and financial assets, which generally influence its monetary stability, and adequately allocating financial resources.

5. Conclusion

In this paper, we analyze how investment in corporate social responsibility will affect dividend policy in terms of dividend per share and stock dividend, risk, and financial stability of banks. Based on a sample of 32 banks currently operating in the economy of Bangladesh and a total of 290 bank- observations between 2008 and 2018, after controlling some factors or determinants of dividend, risk, and financial stability and finally we find that in the case of CSRI, the value of the coefficient is

2850.892*** for model 1 and 2859.91*** for model 2. Again, the value of the t-statistic is 2.554 ($t > 2$), and the p-value is 0.01*** ($p < 0.05$). So, corporate social responsibility has a statistically significant and positive effect on the dividend policy. This result strongly supports the idea that a company that incurs more expenditure on corporate social responsibility will also be dynamic in the payment of dividends. An organization must fulfill stakeholders' financial and non-financial claims to reach the goal. Thus, when a dividend is paid to meet the shareholders' financial commitment up to a certain level, the firm has to fulfill non-financial commitment by performing CSR activities. Again, the Firm allocates dividends from its earnings to its shareholders, making CSR expenditures from its profit. Therefore, When the Firm makes obsessive expenditures on CSR, its dividend-paying capacity will be narrow. However, when the payment of dividends to shareholders arrives at a high level, CSR cannot always be expected to be positively associated with dividend payments longer, and obsessive expenditures on CSR out of profit will result in mediocre dividend payments to shareholders. We used leverage and non-performing loans to total loans as determinants of risk. Again, there is a statistically negative association between corporate social responsibility and overall risk, which means an increase in one unit of overall financial risk will decrease the amount of expenditure for CSR purposes. This may happen because high leverage enhances the cost of transactions and fixed expenditures for raising capital from external financial sources. As a result, firms have to pay a large amount of money from their income to use external capital sources as a fixed payment. The greater the leverage ratio, the lower the possibility of dividends, as leverage has a negative relationship with dividends. Moreover, there are statistically significant and positive associations between corporate social responsibility and financial stability. Moreover, financial stability is measured by the Z score, where we find a statistically positive association between corporate social responsibility and financial stability. A positive and good ratio of

Z score indicates that the banks' financial stability is high and stable enough, which will help in measuring and efficiently handling the banks' financial risks, obviating price fluctuations of tangible and financial assets that generally influence the banks' monetary stability, and adequately allocating financial resources within the firm.

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